

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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Federal Communications Commission
Office of the Secretary

In the Matter of)
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Redevelopment of Spectrum to)
Encourage Innovation in the Use)
of New Telecommunications)
Technologies)
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_____)

ET Docket No. 92-9

ORIGINAL
FILE

REPLY COMMENTS OF
PERSONAL COMMUNICATIONS NETWORK SERVICES OF NEW YORK, INC.

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SUMMARY

As a direct result of PCNS-NY's market-based negotiations with existing users of the 1850-1990 MHz band, four separate licensees of microwave facilities operating in the 1850-1990 MHz band have submitted letters to the FCC that express their willingness to relocate their microwave facilities in the 1850-1990 MHz band to higher frequencies through negotiations with PCS licensees. These letters demonstrate that, in the real world, the Commission's proposal to reallocate spectrum in the 2 GHz band to an emerging technologies band through market-based negotiations and a three step transition plan, is acceptable to both existing users of the 2 GHz band and licensees of new services, such as PCS.

Market-based negotiations will not be successful without adoption of each component of the Commission's proposed transition plan. The first two elements of the Commission's transition plan, approval of applications for new facilities in the 2 GHz band on a secondary basis only and the establishment of a fixed time frame for transitioning existing facilities in the 2 GHz band to secondary status, provide the vital and necessary incentive for existing users to negotiate relocation agreements with new licenses. PCNS-NY's actual market place experience, has shown that without these incentives, existing users will become more firmly entrenched in their use of the 2 GHz band. In order

existing users, the Commission's three step transition plan must be adopted as proposed.

Relocation of existing users' 2 GHz facilities to higher frequencies or alternative media is the only means to ensure that existing users and new licensees are able to operate their services with adequate interference protection. Sharing of the spectrum or co-primary use of the spectrum by both microwave facilities and PCS will not provide the interference protection required by existing users and will stymie the growth of PCS. PCS cannot be implemented efficiently if PCS must fight with existing services for small slivers of spectrum on a co-primary basis. Allocating the band on a co-primary basis will simply defer the battle for control of the band because ultimately either the new or the existing services will have to be relocated to resolve interference issues.

The battle over shared spectrum is unnecessary under the Commission's proposal. The Commission has proposed a framework for creating the emerging technologies band that will benefit existing users, new service providers and the American people. As clearly demonstrated by the comments filed by equipment manufacturers and other experts in the design of microwave networks, existing users of the 2 GHz band can relocate their facilities to frequency bands above 3 GHz that offer adequate spectrum and equivalent reliability. The suitability of these

spectrum and equivalent reliability. The suitability of these higher frequencies for reliable microwave network is established by the operation of reliable microwave networks by numerous federal agencies and private organizations.

The timeliness and benefits of the Commission's proposal have been recognized by public safety agencies. In this time of fiscal crisis for many local governments, public safety agencies are eager to obtain new state-of-the-art communications systems at no cost to the taxpayer. The enthusiasm of these agencies demonstrates that the exception for state and local governments is unnecessary or, at a minimum, should be narrowly construed.

The Commission has the opportunity in this proceeding to ensure that the United States remains at the forefront of telecommunications services and technologies. Motorola's introduction of new technologies in other countries rather than the United States is a warning signal that the people of the United States and the United States economy will suffer without prompt Commission action. Expedient action by the Commission to establish the emerging technologies band does not require the Commission to choose between reliable electric service and unproven new technologies. The choice to be made is a choice for the prompt introduction of new technologies that will maintain the United States' position as a world leader in telecommunications. Adoption of the proposals in the Notice

will chart the course for the timely introduction of PCS one of the most promising emerging services in the United States.

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**REPLY COMMENTS OF
PERSONAL COMMUNICATIONS NETWORK SERVICES OF NEW YORK, INC.**

Personal Communications Network Services of New York, Inc., a LOCATE Company ("PCNS-NY"), by its undersigned counsel, hereby submits these Reply Comments in response to the comments filed at the Federal Communications Commission ("FCC" or "Commission") concerning the Commission's Notice of Proposed Rulemaking ("Notice") to establish an emerging technologies band. The emerging technologies band is anticipated to provide a source of spectrum for personal communications services ("PCS").^{1/}

^{1/} In the Matter of Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, Notice of Proposed Rulemaking, ET Docket No. 92-9, 7 FCC Rcd. 1542 (1992).

I. INTRODUCTION

The comments filed in response to the Commission's Notice demonstrate that the FCC must make a choice. The choice is not, as some opponents of the Commission's proposal claim, between reliable electric service, safe railroads and futuristic, unproven technologies. The choice the Commission must make is whether it will permit the "catastrophic lobbying" of some existing 2 GHz users to block the timely introduction of PCS or, whether the Commission will adhere to the course necessary to introduce PCS in the United States.

If the proposals in the Notice are adopted, the lights will not go out in New York or California and the trains will not stop running. What will happen, is that representatives of utilities, public safety agencies, and PCS licensees, such as PCNS-NY, will continue to sit down in conference rooms across the country and negotiate agreements that will provide existing users of the 1850-1990 MHz band with new, reliable and efficient microwave communications systems at no cost to the ratepayers or the taxpayers. In today's economy, cash poor public safety agencies clearly see the timeliness and benefits of relocation -- modern communications networks at no cost. Utilities in collaboration with potential new PCS licensees are in a position to benefit not only from early access to PCS but also from the cooperative development of local distribution microwave networks

that will support the offering of innovative services such as local telemetry.^{2/}

PCNS-NY has already begun negotiating with existing users to relocate their microwave facilities in the 1850-1990 MHz band. These negotiations have provided the best, uncontroverted evidence of the feasibility and value of the Commission's proposal: four independent letters submitted by existing users of the 1850-1990 MHz band to the FCC that express their willingness to relocate their microwave facilities in the 1850-1990 MHz band to higher frequencies based upon negotiations with PCNS-NY.^{3/} These letters from the Suffolk County Police Department, Long Island Lighting Company, San Diego Gas & Electric and the City of San Diego establish conclusively the balanced approach inherent in the Commission's proposed transition plan and the benefits it holds for existing users. Each of these organizations operates microwave facilities in the 1850-1990 MHz band. The network and communications needs of these users are not unique among existing users of the 1850-1990 MHz band. These users all operate efficient communications networks that provide reliable communications capabilities that will not be compromised by relocation to higher frequencies.

^{2/} See Rivkin, FCC to Electric: Move, Use, or Lose!, Public Utilities Fortnightly (May 1, 1992) (discussing opportunity created by Commission's proposal for electric utilities to join with "providers of new microwave services" in cooperatively developing microwave services in local distribution).

^{3/} See PCNS-NY Comments at Exhibits A through D.

The efforts of PCNS-NY have not gone unnoticed. Recently, PCNS-NY has been contacted by a growing number of users that operate microwave facilities in the 1850-1990 MHz band and are eager to negotiate with PCNS-NY to relocate their microwave facilities. The willingness of these users to relocate their microwave facilities in the 1850-1990 MHz band based on negotiations with a potential PCS licensee, demonstrates that once the territorial lobbying positions of the trade associations are stripped away, existing users and new licensees can reach market-based solutions that adequately address the needs of existing users and will provide exclusive, adequate spectrum for PCS.^{4/}

The Commission's transition plan embodies the incentive for market-based negotiations in its proposal to approve new applications for use of the 1850-1990 MHz band on a secondary basis only and through its proposal to transition existing users to secondary status after a fixed time period.^{5/} Without these

^{4/} In their comments, several current occupants of the 1850-1990 MHz band have raised concerns regarding the reliability of higher frequencies, the potential disruption in service and the costs of relocation. PCNS-NY has addressed each of these concerns in its negotiations with existing users and in its initial comments. PCNS-NY has chosen not to reiterate those discussions in these comments but refers the Commission to its initial comments for a detailed discussion of each of these issues.

^{5/} The Commission's transition plan has three components: (1) approval of applications for new facilities in the 2 GHz band on a secondary basis only (as modified by the Commission to permit limited modifications and extensions of existing networks); (2) adoption of a fixed time frame at the end of which existing users' facilities in the 2 GHz band revert to secondary
(continued...)

incentives, negotiations between existing users and PCS applicants will not occur.

A fundamental component of PCNS-NY's negotiations with existing users has been the acknowledgement by both parties that the 1850-1990 MHz band will be reallocated by the FCC for use by emerging technologies such as PCS. The comments filed by several existing users of the 1850-1990 MHz band reveal that, if given additional protections to occupy the 1850-1990 MHz band, such as indefinite, co-primary use of the band, existing users will become more firmly entrenched in what they incorrectly perceive to be their "right" to exclusive or priority use of the 1850-1990 MHz band. Existing users will become more intransigent and either refuse to negotiate even favorable relocation agreements or, use their reinforced territorial rights as a means to increase the price of relocation to include a premium beyond the reasonable costs of relocation.

Elimination of any of the components of the Commission's proposed transition plan will destroy the equal bargaining power currently embodied in the Commission's proposal. This unequal bargaining power will result in continued, indefinite occupancy of the 2 GHz band by existing users and will threaten the successful introduction of PCS by reducing the availability of adequate spectrum for exclusive allocation to PCS or boosting the relocation costs that new PCS providers will have to absorb as

^{5/} (...continued)
status; and (3) encouragement of market-based negotiations.
Notice at ¶¶ 23-26.

existing users seek to obtain wind-fall profits in relocation negotiations.

The Commission must recognize the fallacy of the choice that some existing users of the 1850-1990 MHz band have posed to the Commission and chose to continue to chart the course for allocating spectrum that will support the introduction of new technologies, new services and promote the larger, more effective use of not only the 1850-1990 MHz band but also higher frequencies already allocated to microwave use, such as the 4, 6, 10, 12 and 18 GHz bands. This course requires adoption of the Commission's transition plan as proposed.

II. THE FIRST ALLOCATION OF SPECTRUM FROM THE EMERGING TECHNOLOGIES BAND WILL BE FOR IDENTIFIABLE, PROVEN SERVICES -- PERSONAL COMMUNICATIONS SERVICES

The creation of an emerging technologies band is in the public interest and will permit the prompt and continuous introduction of new and evolving radio-based technologies and services -- services, such as PCS, that are in demand by the American people and merely await an allocation of spectrum for introduction in the United States. Opponents seeking to derail this proceeding and the reallocation of spectrum to an emerging technologies band, contend that the emerging technologies and services that will receive spectrum from this band, including PCS, are unproven, undefined and that an allocation of spectrum

for their ultimate use is premature.^{6/} Taken to its logical conclusion, the position of these opponents would freeze the state of radio-based telecommunications services in the United States to those offered today and prevent all future allocations of spectrum to new radio-based services including services for which there is a proven public demand, such as PCS.^{7/}

The claim of several commentators that the Commission has failed to identify the services that ultimately may benefit from an emerging technologies band ignores the nature of this proceeding and the information contained in the Notice.^{8/} The emerging technologies band will provide a source of spectrum for future allocations to new services that make innovative use of a new technology or expansions of existing services that offer some substantial improvement in either the quality of the service or

^{6/} See, e.g., Large Public Power Council ("LPPC") Comments at 19; Edison Electric Institute ("EEI") Comments at 4.

^{7/} The Utilities Telecommunications Council's ("UTC's") suggestion that the Commission allocate spectrum just beyond the immediate grasp of today's technological capabilities would have the same effect as a moratorium on the introduction of new technologies. UTC Comments at 19.

^{8/} See, e.g., UTC Comments at 6-7; EEI Comments at ii. UTC incorrectly claims that the Notice assumes that each technology identified as a potential recipient of spectrum from the emerging technologies will be entitled to an exclusive allocation of spectrum in the amount requested. UTC Comments at 10. Allocations of spectrum from the emerging technologies band to particular services will be accomplished through separate allocation proceedings. The Commission has not proposed to make any specific allocations in this proceeding other than to the emerging technologies band. If all the services identified in the Notice were found to warrant an exclusive allocation of spectrum, the Commission would have had to propose an emerging technologies band that encompassed a minimum of 376 MHz of spectrum. See Notice at ¶ 4.

spectrum efficiency.^{9/} The creation of the emerging technologies band is the first step in a two step allocation process for PCS. An actual allocation of spectrum for PCS will require: (1) creation of the emerging technologies band; and (2) a subsequent allocation of spectrum from the emerging technologies band to a particular service.^{10/}

In the Notice, the Commission has identified a range of potential services that could receive an allocation of spectrum from the emerging technologies band. In addition to PCS, the Commission cites as examples of emerging technologies: general mobile satellite service, digital audio broadcasting service, and low earth orbital satellites.^{11/} The first allocation of spectrum from the emerging technologies band to PCS will permit the timely introduction of one of the most promising emerging technologies and new service offerings.

**A. PCS Are Developed, Available Communications Services That
Will Incorporate State-of-the-Art Wireless Technologies**

1. There Is A Proven Demand for PCS in the United States

PCS is not a speculative service. PCS is a defined service that is being introduced in Europe, Japan and Canada. In the United States, the FCC has issued over one hundred and forty

^{9/} Notice at ¶ 28.

^{10/} Commentors will have an adequate opportunity to address the allocation of spectrum to a particular service in the spectrum allocation proceeding.

^{11/} Notice at ¶ 4.

experimental licenses to test PCS technologies. The value, need and viability of PCS has been proven in these experiments and numerous marketing studies that have been conducted by PCNS-NY and other experimental licensees over the past two years. The experiments with PCS technologies have reached the point of diminishing returns. Further experimentation will not yield further definition or evidence of the value of PCS to the American people and the United States economy. What is called for now is leadership by the FCC to allocate spectrum to PCS and license the services.

Studies of the United States market for PCS, document the proven demand for PCS that will meet the needs of today's consumers that are not being met by existing wireline or radio-based services. Within three years of introduction of PCS, 20 million users are expected to use PCS in the United States. If PCS operations begin in 1994, there could be as many as 60 million customers of PCS in the United States by 2002.^{12/}

PCS will provide a sorely needed new source of employment, income and revitalization for the people of the United States and the United States economy.^{13/} According to Motorola, the

^{12/} Telecator PCS Presentation to the Federal Communications Commission, PCS Consensus Positions (June 5, 1992) at 6.

^{13/} The New York City metropolitan area, the market in which PCNS-NY has requested a pioneer's preference, has been hard hit by the recession. On April 16, 1992, The New York Times reported that, over the last three years, over 500,000 jobs have been lost -- a record high. Sarah Bartlett, New York Logs 500,000 Jobs Lost Since 1989, a Record High, N.Y. Times, April 16, 1992 at B1. Early deployment of PCS in the New York City metropolitan
(continued...)

telecommunications market as a whole is predicted to out pace growth in the general economy at a rate of two-four to one.^{14/} The market for telecommunications equipment and services is expected to reach three trillion dollars by 2010.^{15/} Growth in the wireless market is anticipated to exceed overall industry growth.^{16/} This growth is entirely dependent on a sufficient allocation of spectrum for emerging wireless services. PCS is expected to be a \$195 billion international industry by the end of the next decade with 65% of American households subscribing to PCS.

With exclusive spectrum available and allocated to PCS, the American people will be able to purchase reasonably-priced PCS, work for PCS companies, improve their productivity at work and at home and the United States will remain a leader in telecommunications products and services. By contrast, without a prompt and adequate allocation of spectrum for these services,

^{13/} (...continued)

area would provide a much needed, new source of employment and growth in this area. Chairman Sikes recently testified that new emerging wireless technologies could generate more than 100,000 new jobs. See Testimony of Chairman Alfred C. Sikes Before the United States Senate Subcommittee on Communications, Committee on Commerce, Science and Transportation, June 3, 1992.

^{14/} Motorola Comments at 6.

^{15/} Id.

^{16/} Id.

the United States will be relegated to the sidelines while other industrialized nations aggressively launch PCS.^{17/}

Delay in an allocation of spectrum to PCS or, an allocation of spectrum inconsistent with the international allocation to mobile services, will result in loss of an unparalleled new market for U.S. equipment manufacturers and telecommunications service providers.^{18/} There is a tremendous market for PCS equipment and services in the United States and internationally. In a recent letter from Thomas J. Sugrue, Acting Assistant Secretary of Commerce for Communications and Information, to Congressman Edward J. Markey, Chairman of the U.S. House of Representatives Subcommittee on Telecommunications and Finance, Mr. Sugrue succinctly and accurately characterized the window of opportunity for PCS:

This market potentially represents one of the biggest domestic and international telecommunications opportunities of the decade to advance the interests of U.S. industry.^{19/}

^{17/} Other nations already have adopted reallocation strategies to accelerate the introduction of PCS. See, e.g., Council Directive 91/287/EEC (June 3, 1991) (requiring Member States to designate frequencies in 2 GHz band to Digital European Cordless Telecommunications by January 1, 1992).

^{18/} Northern Telecom, one of the largest manufacturers of telecommunications equipment agrees that an allocation of spectrum compatible with international allocations made by the World Administrative Radio Conference will result in economies of scale that will translate into lower subscriber costs for PCS. Northern Telecom Comments at 4.

^{19/} Letter to Congressman Edward J. Markey from Thomas J. Sugrue, Acting Assistant Secretary of Commerce for Communications and Information, June 12, 1992, at 2.

Mr. Sugrue also reflected the serious concern of U.S. manufacturers that the next two years are critical to the United States' leadership position in developing component-level radio frequency devices:

[T]hey [manufacturers] contend, if the United States does not have service plans, including frequency allocations within two years, the United States will be playing catch up with the European and Japanese manufacturers. . . . the longer the United States proceeds without its own plans for mobile service in the 2 GHz bands, the more likely it will be that European or Japanese solutions will dominate the development of this service, which would adversely affect U.S. manufacturers.^{20/}

This analysis lead Mr. Sugrue to the logical conclusion that:

the U.S. government should not hamstring U.S. consumers, manufacturers and service providers from realizing the potential benefits of new services by failing to allocate spectrum for them in a timely fashion.^{21/}

The delay in allocating spectrum for emerging technologies has already begun to take its toll. Motorola, in its comments, indicated that it has begun to depart with its history of introducing new technologies in the United States: "Motorola still introduces new technologies, but it is being done first in offshore markets."^{22/} This disturbing trend is a warning signal that the United States cannot afford the delay several

^{20/} Id. at 4.

^{21/} Id.

^{22/} Motorola Comments at 11.

commentors have sought to inject into this proceeding by creating an unnecessary spectrum battle over the 2 GHz band.^{23/}

2. A Variety of PCS Services Are Available For Immediate Introduction

In the United States, PCS will not be limited to, or defined by, a single service. PCS are continuously referred to as a family of services that are defined by their common service characteristic -- the ability to provide ubiquitous, wireless telecommunications services to individuals rather than fixed points.^{24/} PCS will draw upon a broad base of existing technologies. In its Policy Statement and Order on PCS, the Commission indicated that it would broadly define PCS to permit significant flexibility in the development of technologies and services.^{25/} Flexibility in the definition of PCS, and the diversity in experiments with a wide range of PCS technologies does not mean that PCS are undefined or undeveloped.

^{23/} See, e.g., Association of American Railroads, LPPC and American Petroleum Institute, Petition to Suspend Proceeding (filed April 10, 1992); Alcatel Network Systems, Inc., Motion to Defer Comment Dates (filed May 11, 1992); UTC Petition for Rulemaking (filed March 31, 1992); UTC Petition for Further Issuance of Notice of Proposed Rulemaking (filed May 1, 1992). Most recently, several utilities have petitioned the Commission to hold an administrative hearing in this proceeding. See, e.g., Public Service Electric and Gas Company, Petition for Administrative Hearing (filed June 28, 1992).

^{24/} See En Banc Hearing Statement of R. Craig Roos, Chief Executive Officer of LOCATE, December 5, 1991.

^{25/} In the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, Gen. Docket 90-314, Policy Statement and Order, 6 FCC Rcd. 6601 (1992), ("Policy Statement"), at ¶ 3.

The Commission has been considering PCS formally for two years.^{26/} After two years of analysis and experimentation, the Commission's proposal to create an emerging technologies band that will provide spectrum for PCS is not premature.^{27/} Indeed, inaction or further delay threatens to result in the loss of United States' competitive edge in telecommunications. Equipment manufacturers have already begun to produce equipment designed to meet the spectrum allocations of the European nations and other countries that are quickly assuming the mantle of leadership in the PCS revolution. The uncertainty of the FCC's allocation of spectrum to PCS has stymied the production of PCS equipment for the United States market. The reluctance of equipment manufacturers to proceed full scale with the final manufacturing process of PCS equipment does not reflect a lack of development of PCS technology but rather a temporary and calculated business judgment to await further guidance from the Commission.

B. Small, Entrepreneurial Companies That Have Pioneered the Development of PCS Will Be Eliminated as PCS Providers If A Spectrum Allocation for PCS is Delayed

Delay in this proceeding will prohibit small, entrepreneurial companies such as PCNS-NY who have pioneered the development of PCS from becoming licensed providers of PCS.

^{26/} See In the Matter of Amendment of the Commission's Rules to Establish New Personal Communications Services, Gen. Docket 90-314 Notice of Inquiry, 5 FCC Rcd. 3995 (1990) ("Notice of Inquiry").

^{27/} Cf. EEI Comments at 4.

Although, many commentators who oppose the Commission's proposal claim that they are not seeking to delay the introduction of PCS or other emerging technologies,^{28/} that is the precise result of the opponents' efforts. The barrage of proposals by existing users suggesting the study of alternative spectrum for potential allocation to the emerging technologies band is an unnecessary distraction.^{29/} Alternative spectrum for allocation to the emerging technologies band has been reasonably considered by the Commission.^{30/} Further study is unnecessary and would merely delay this proceeding and expand the spectrum battles without a corresponding public benefit.^{31/} In addition, the possible allocation of government spectrum for the wholesale accommodation of existing occupants of the 1850-1990 MHz band or, for allocation to new technologies, is not a feasible alternative for PCS. The delay inherent in this approach would protract the introduction of PCS in the United States at a time when other

^{28/} LPPC Comments at n. 20.

^{29/} See, e.g., UTC Comments at 20-44 (suggesting further consideration of 2.5-2.69, 2.4-2.5, 1.99-2.11, as source of spectrum for emerging technologies band); UTC Petition for Further Issuance of Notice of Proposed Rulemaking; Association of American Railroads ("AAR") Comments at 22; American Public Power Association ("APPA") Comments at 14.

^{30/} See Notice at ¶¶ 11-18; Creating New Technology Bands for Emerging Telecommunications Technology, OET/TS 91-1 ("FCC Study").

^{31/} See, e.g., National Broadcasting Co., Inc. Comments at 1.

countries are aggressively proceeding with their introduction.^{32/} Further delay in this proceeding to analyze the myriad of alternative choices posed by the commentors is unwarranted when the Commission has already structured a reasonable regulatory framework that will minimize the disruption to existing users and has appropriately identified suitable spectrum for reallocation to the emerging technologies band.

PCNS-NY, one of the early pioneer's of PCS services, is a small, entrepreneurial company that does not have the financial resources to sustain a prolonged and unnecessary battle over spectrum for PCS. Accordingly, PCNS-NY has devoted a significant amount of its resources to meeting with existing users to develop individual spectrum management solutions. Delay in an allocation of spectrum for PCS and licensing of the services will inhibit the ability of PCNS-NY and other entrepreneurial companies to maintain financing and attract investors for their PCS initiatives thereby limiting the field of potential PCS providers to those users that are already major players in the domestic telecommunications industry. This narrowing of the pool of potential PCS providers is inconsistent with the Commission's

^{32/} See Comments of National Telecommunications and Information Administration ("NTIA") at 20 (describing thorough review of usage of government 2 GHz band as a complex process that will take time); see also PCNS-NY Comments at 24-28.

goal of authorizing PCS as a competitive service and its recently adopted pioneer's preference rules.^{33/}

PCNS-NY's experimental efforts have proven the valuable role that small, creative entrepreneurial companies play in the development of innovative approaches to the introduction of new technologies and services. The existing users with whom PCNS-NY has negotiated have provided the Commission with a strong record of irrebuttable evidence that its transition plan will benefit existing users of the 1850-1990 MHz band and provide spectrum for new technologies. No other experimental licensing has demonstrated a similar dedication or effort to working directly with existing users of the 1850-1990 MHz band to reach satisfactory relocation agreements.

^{33/} See Policy Statement at ¶ 7; In the Matter of Establishment of Procedures to Provide a Preference to Applicants Proposing an Allocation for New Services, Report and Order, Gen. Docket No. 90-217, 6 FCC Rcd. 3488 (1991). Chairman Sikes recognized the valuable role of entrepreneurs in introducing new wireless technologies in his testimony before the U.S. Senate Subcommittee on Communications: "By expanding access to the radio spectrum on the part of potential innovators and entrepreneurs, we can produce a further wave of innovation. That would both broaden customer choice while, at the same time, strengthen American competitiveness -- not simply in radio communications, but in an array of other businesses which are dependent on communications." See Testimony of Chairman Alfred C. Sikes Before the United States Senate Subcommittee on Communications, Committee on Commerce, Science and Transportation, June 3, 1992 at 7.

III. RELOCATION OF EXISTING USERS' 2 GHz MICROWAVE FACILITIES WILL PROTECT EXISTING USERS AND PERMIT THE SUCCESSFUL INTRODUCTION OF PCS.

A. Adequate Interference Protection is Critical to Existing Users of the 1850-1990 MHz Band and Can Only Be Ensured Through Relocation

It is critical to both existing users of the 1850-1990 MHz band and new services, such as PCS, that each service be able to operate in spectrum protected from interference. Throughout PCNS-NY's discussions with organizations that operate microwave facilities in the 1850-1990 MHz band throughout the United States, these existing users have indicated consistently that they cannot tolerate any interference with their communications networks.^{34/} These sentiments are echoed in the comments of the LPPC, an association that represents a majority of the nation's largest public power systems.^{35/} Not surprisingly, LPPC and numerous other users question whether spectrum sharing or a co-primary allocation of the band will provide acceptable interference protection.^{36/}

In the Notice, the Commission proposes to provide interference protection by encouraging market-based negotiations between new licensees and existing users to relocate the existing

^{34/} See PCNS-NY Comments at 31.

^{35/} LPPC Comments at 6.

^{36/} Id.; see also, AAR Comments at 5; Tacoma Public Utilities Comments at 2; Department of Water and Power -- City of Los Angeles Comments at 1; Atlantic City Electric Company Comments at 10.